

The Office has rejected claims 10-14, 38, 42 and 44 under 35 U.S.C. 102(b) as being anticipated by Wright and Morrison (1994) J. Exp. Med. 180:1087-1096 (Wright et al.). The Office contends that Wright et al.

teach a composition comprising a human IgG1 antibody wherein said antibody has at least one Ig CH2 domain "containing" G-2 (e.g. G-2 plus two additional Man<sub>α1</sub>) wherein said antibody is free of G2, G1, G0 or G-1 oligosaccharides (see Fig 1 and abstract).

Applicants respectfully traverse.

Wright et al. describe the production of chimeric mouse-human IgG1 antibodies in a mutant Chinese hamster ovary (CHO) cell line deficient in N-acetyl glucosaminyltransferase I activity (Lec 1). Lec 1 synthesizes oligomannosyl structures not normally found on IgG such as the structure shown at Figure 1 B. (Wright et al., page 1088).

It is well settled that in order for a reference to anticipate a claimed invention under 35 U.S.C. 102(b) a single prior art reference must disclose each element of the claimed invention. Applicants claims 10-16, 38, 42 and 44 delineate compositions containing G-2 oligosaccharide structures. Art recognized G-2 oligosaccharide structures are described at, for example, page 14 of the specification. The structures produced by the mutant cell line described by Wright et al. in Figure 1 B are not G-2 oligosaccharides. Further, the office's position that the structure described by Wright et al. and produced by the Lec 1 cell could be considered a G-2 oligosaccharide containing additional mannose residues is scientifically unsound and an unreasonable construction of the claim.

In view of the foregoing, reconsideration and withdrawal of the pending rejection of the claims under 35 U.S.C. 102(b) is respectfully requested.

2. The Rejection of Claims 10-16, 36, 38, 42 and 44 under U.S.C. § 103(a)

The Office has rejected claims 10-16, 36, 38, 42 and 44 under 35 U.S.C. § 103(a) as being unpatentable over Wright et al. in view of U.S. Patent 5,047,335 (hereafter, Paulson et al.) and art disclosed in the specification. Applicants respectfully traverse.

The Office contends that Wright et al. describe a composition containing a G-2 oligosaccharide. The office contends that the oligosaccharide described by Wright et al. in Figure 1 B could be considered a G-2 oligosaccharide comprising additional features. However, as noted above, the structures described in Figure 1 B of Wright et al. are not G-2 oligosaccharides nor would they be considered G-2 oligosaccharides containing additional features as suggested by the Office.

Applicants have previously addressed Paulson et al. which describe methods of producing proteins with a particular glycosylation pattern and that such proteins are useful for research and diagnostic purposes. In view of the foregoing discussion concerning Wright et al., it is submitted that the combination of references provided by the Office does not establish a *prima facie* case of unpatentability.

Further, the Office contends that Applicants have disclosed a variety of therapeutically useful anti-CD20 antibodies. The office has asserted that in view of these disclosures, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the present invention was made to have created the claimed inventions. The Office contends that in view of Paulson et al. the skilled artisan would have been motivated to create altered versions of therapeutically useful antibodies such as anti-CD20 antibodies in order to assess the role of oligosaccharide function in the therapeutic effect seen when the antibody was administered.

However, as indicated above the combination of references provided by the Office does not establish *prima facie* obviousness of claims 10-16, 36, 38, 42 and 44. Therefore, Applicants submit that further discussion in view of Applicants own disclosure is unnecessary.

In view of the foregoing, and Applicants respectfully request withdrawal of the pending rejection of the claims under 35 U.S.C. § 103(a).

CONCLUSION

Applicant respectfully requests that the foregoing remarks be considered and entered in the file history of the above-identified application. It is submitted that all grounds for rejection have been removed and the claims are now in condition for allowance. It is therefore earnestly solicited that such a final favorable disposition is made. The Examiner is invited to

telephone Jeffrey S. Kubinec, Esq. (Reg. No. 36,575) at (650) 225-8228 if deemed helpful to clarify and advance prosecution.

Respectfully submitted,  
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